AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1   (Currently Amended) A concentrator for voice telephones installed in a ~~LAN~~local

area network comprising a ~~LAN~~local area network switching unit for switching and connecting a

plurality of interfaces, and a plurality of ~~LAN~~local area network hubs accommodating equipment

connected to the ~~LAN~~local area network switching unit via the interfaces, respectively, and for

performing data communication over the ~~LAN~~local area network, said concentrator comprising:

        a ~~LAN~~local area network interface connected to the ~~LAN~~local area network switching unit;

        ~~at least one voice telephone;~~ and

        at least one set of voice telephone interfaces connected to the at least one voice telephone,

wherein digital or analog voice data transmitted and received by the at least one set of the telephone

interfaces are converted into ~~MAC~~media access control frames or ~~IP~~internet protocol packets, and

the digital or analog voice data converted into the ~~MAC~~media access control frames or ~~IP~~internet

protocol packets are relayed to the ~~LAN~~local area network interface.

Claim 2   (Previously presented)   A concentrator for voice telephones according to Claim

1, further comprising:

        a ~~CPU~~central processing unit; and

        a second ~~LAN~~local area network interface for performing transmission and reception of data

between the ~~CPU~~central processing unit and one of the ~~LAN~~local area network hubs.

Claim 3   (Previously presented)   A concentrator for voice telephone according to Claim

1, wherein signals from circuits of analog telephone networks subscribers are converted into call

control protocols according to ~~TCP~~transmission control protocol – ~~IP~~internet protocol so as to be

able to accommodate the analog telephone subscribers' terminals.

Claim 4   (Currently Amended) A concentrator for voice telephone according to Claim 1,

further comprising:

        a ~~CPU~~central processing unit; and

        a second ~~LAN~~local area network interface for performing transmission and reception of data

with the ~~CPU~~central processing unit and wherein the digital or analog voice data received from the

at least one voice telephone is converted into ~~TCP~~transmission control protocol – ~~IP~~internet

protocol packets or ~~UDP~~user datagram protocol – ~~IP~~internet protocol packets, and the

~~TCP~~transmission control protocol – ~~IP~~internet protocol packets or ~~UDP~~user datagram protocol –

~~IP~~internet protocol packets are transmitted and received via the second ~~LAN~~local area network

interface.

Claim 5   (Previously presented)   A concentrator for voice telephones according to Claim

4, further comprising a router connected to the second ~~LAN~~local area network interface for

connecting the second ~~LAN~~local area network interface to either the outside of the ~~LAN~~local area

network or the ~~LAN~~local area network hubs.

Claim 6.   (Previously presented)   A method of communication over a ~~LAN~~local area

network comprising a plurality of ~~LAN~~local area network hubs coupled to computing equipment for

performing data communication, a plurality of concentrators coupled to voice telephones, and a

~~LAN~~local area network switching unit, having a plurality of ports and for switching and connecting

between the plurality of the ~~LAN~~local area network hubs, and the plurality of the concentrators for

voice telephones, the method comprising the step of:

performing call control for the voice telephones coupled to each of the concentrators with

the computing equipment in each of the ~~LAN~~local area network hubs wherein the case that a

response from a PC or work station on the call-in side is not obtained, arrival of a call request is

notified, and the response is detected by use of control channel signals of a voice telephone interface

on the call-in side.

Claims 7-9 (canceled)

Claim 10   (Currently amended) A telecommunication apparatus for voice telephones installed

in a ~~LAN~~local area network including a plurality of ~~LAN~~local area network equipment, the

telecommunication apparatus comprising:

at least one ~~LAN~~local area network interface coupled to the ~~LAN~~local area network

equipment;

a ~~CPU~~central processing unit;

~~at least one voice telephone;~~

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a set of voice telephone interfaces adapted to receive and transmit digital and analog voice data or call control data between the ~~CPU~~central processing unit and ~~the~~ at least one voice telephone, wherein the ~~CPU~~central processing unit is adapted to convert the digital and analog voice data or call control data into ~~IP~~internet protocol packets or ~~MAC~~media access control frames and transmit the ~~IP~~internet protocol packets or ~~MAC~~media access control frames to the at least one ~~LAN~~local area network interface wherein the set of voice telephone interfaces are adapted to perform a BORSCHT function.

Claim 11   (Previously presented)   The telecommunications apparatus of claim 10, further comprising a router connected to at least one ~~LAN~~local area network interface and to a ~~LAN~~local area network hub or outside of the ~~LAN~~local area network.

Claim 12   (Previously presented)   The telecommunications apparatus of claim 10, wherein the ~~LAN~~local area network equipment includes one of a ~~LAN~~local area network hub and a ~~LAN~~local area network switching unit.

Claim 13   (Previously presented)   The telecommunications apparatus of claim 10, further comprising a LANC circuit coupled to the ~~CPU~~central processing unit and voice telephone interface for assembling and disassembling a ~~MAC~~media access control frame.

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Claim 14   (Previously presented)   The telecommunications apparatus of claim 10, wherein the call control data are converted into a call control protocol according to ~~TCP~~transmission control protocol/~~IP~~internet protocol.

Claim 15   (Currently amended)   A telecommunication apparatus for voice telephones installed in a ~~LAN~~local area network including a plurality of ~~LAN~~local area network equipment, the telecommunication apparatus comprising:

at least one ~~LAN~~local area network interface coupled to the ~~LAN~~local area network equipment;

a ~~CPU~~central processing unit;

~~at least one voice telephone;~~

a set of voice telephone interfaces adapted to receive and transmit digital and analog voice data or call control data between the ~~CPU~~central processing unit and ~~the~~ at least one voice telephone, wherein the ~~CPU~~central processing unit is adapted to convert the digital and analog voice data or call control data into ~~TCP~~transmission control protocol/~~IP~~internet protocol packets or ~~UDP~~user datagram protocol/ ~~IP~~internet protocol packets and transmit the packets to the at least one ~~LAN~~local area network interface.

Claim 16   (Previously presented)   The telecommunications apparatus of claim 15, further comprising a router connected to the at least one ~~LAN~~local area network interface and to a ~~LAN~~local area network hub.

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Claim 17   (Previously presented)   The telecommunications apparatus of claim 15, further comprising a router connected to the at least one ~~LAN~~local area network interface and to an external network.

Claim 18   (Previously presented)   A method of communication over a ~~LAN~~local area network, comprising:

receiving and transmitting digital and analog voice data or call control data between a voice telephone interface and a voice telephone;

receiving and transmitting the digital and analog voice data or call control data between the voice telephone interface and a ~~CPU~~central processing unit;

converting the digital and analog voice data or call control data into ~~IP~~internet protocol packets or ~~MAC~~media access control frames with the ~~CPU~~central processing unit; and

transmitting the ~~IP~~internet protocol packets or ~~MAC~~media access control frames from the ~~CPU~~central processing unit to a ~~LAN~~local area network interface.

Claim 19   (Previously presented)   The method of claim 18, further comprising transmitting the ~~IP~~internet protocol packets or ~~MAC~~media access control frames from the ~~LAN~~local area network interface to a router.

Claim 20   (Previously presented)   The method of claim 19, further comprising transmitting the ~~IP~~internet protocol packets or ~~MAC~~media access control frames from the router to an external network.

Claim 21   (Previously presented)   The method of claim 18, further comprising

transmitting the ~~IP~~internet protocol packets or ~~MAC~~media access control frames to a ~~LAN~~local area

network hub.

Claim 22   (Previously presented)   The method of claim 18, further comprising converting

the digital and analog voice data into ~~TCP~~transmission control protocol/~~IP~~internet protocol packets

or ~~UDP~~user datagram protocol/~~IP~~internet protocol packets with the ~~CPU~~central processing unit.

Claim 23   (new)   A concentrator for voice telephones according to Claim 1, further comprising:

a database coupled to the local area network switching unit or the local area network hubs and

storing media access control addresses for clients of the local area network and providing the

addresses in response to inquires.

Claim 24   (new) The method of claim 18, wherein time slots for the digital and analog voice

data or call control data are converted into the internet protocol packets or media access control

frames.